

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 7:09 AM

**Daily Diary Report by Bid Item**

Contract No.: 04-0120F4

Diary #: 984 Const Calendar Day: 557 Date: 13-Dec-2013 Friday  
Inspector Name: Brignano, Bob Title: Transportation Engineer

Inspection Type:

Shift Hours: Break: Over Time:

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

**04-0120F4  
04-SF-80-13.2/13.9  
Self-Anchored  
Suspension Bridge****Weather**

Temperature 7 AM

12 PM

4PM

Precipitation

Condition overcast am, clear pm

Working Day ☒ If no, explain:**Diary:**

Dispute

**General Comments**

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:



VGO starts work on site at 0800 with Dave Van Dyke and Nick Buck. Lunch is 1200 to 1230. VGO leaves the site at 1500 to go to the airport to fly back to Oregon. They continue yesterday's work on high speed checks on the connected instruments (TR's 5-6, 8-11) at the different test rigs. They also continue building lids/covers to put over the test rig handholes above the instruments to protect the instrumentation and they complete this work today. VGO witnesses ABF's work today to move the jacking rods in TR's 9-11 to verify the VGO wires are not caught/damaged. VGO assists CT-METS with the wire runs for the AE sensor on the couplers at TR's 5 and 6 – the wire for the CT-METS AE sensor on the coupler needs to run out the same handhole as all the VGO wires, so VGO wants to run the CT-METS AE wires so that they can ensure (be responsible) that the VGO wires are not damaged.

ABF Engineer Kelvin Chen spends part of today working in the office and field on CCO 314 issues.

Ironworker Barry Rothman and Rob Martell are working a 12-hour shift (0700 to 1930) today on CCO 314. Laborer Carlos (Pedro) Garcia is working a 12-hour shift (0700 to 1930) on CCO 314. For the 12-hour shifts, the ironworkers and laborer are paid for 12.5 hours for missed dinner per union agreement.

The ironworkers spend part of the morning test cycling the jacks for the test rigs, continuing work started yesterday. They are testing all the jacks to ensure that they will work when they are in the test rigs. This involves running the jacks at no load to run the fluid to check for leaks. Several of the jacks have water in them and need to be cycled to remove the water. The cycling of the 400-ton and 500-ton jacks involves using a weight to retract the jacks because they are single action, but the 300-ton jacks are more easily retracted because they are dual action with two hoses. As discovered yesterday, some of the jacks do not work – one 300-ton jack at TR 6 and one 400-ton jack at TR 8. At TR 6, the 300-ton jacks from TR 1 are tested and will be used instead. At TR 8, the spare 400-ton jacks are tested and will be used instead. Note that just the single problem jack cannot be swapped out at each test rig, because the jacks were calibrated as a pair with ABF's dial gauges and VGO's pressure transducers. After work is completed on the testing of the jacks, the laborer covers all of the jacks with plastic bags to keep water out of them.

The laborer spends the day on various safety setups, preparation for jack support, and miscellaneous cleanup of the test rig area.

The ironworkers also move the jacking rods in TR's 9-11 to their final positions – they were previously pushed farther to the south to give CCC access for painting the couplers and a portion of the test rod on the south end just outside of the wet chambers. With the painting completed by CCC yesterday, today



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after some paint cure, the rods can be moved to the final positions.

With the jacking rods in the final positions at TR's 9-11, the spherical nuts on the jacking rod against the north end plate can be installed with the spherical washers. The ironworkers discover threading problems on the jacking rod for TR 11. Then the jacking rods for TR's 9 and 10 are determined to be ok and the nuts thread all the way to the end plate without problem. After the problem with TR 11 is noted, they try running a nut on the jacking rod at TR 8 (rod not in the final position yet; this is an early check) and discover that there is a problem with the threads on this jacking rod too. They try different nuts to confirm that the problem is with the threads on the jacking rods and not with the nuts. There is a visible bend or kink at the very end of the jacking rod for these 2 test rigs (TR's 8 and 11), and the rod appears to be straight after the bend (bend only at the very end of the rod). We perform several checks with straight edges on all 4 jacking rods. The nut at TR 8 can be fully installed 4" on the end of the rod but cannot be threaded past that point because of a bend/kink at that location. The nut at TR 11 cannot be fully installed on the end of the rod because the bend is closer to the end. We confirm by our own field measurements and the DJV checks the numbers on paper, and we determine that we can cut off the ends of the rods and still have enough rod length. From the end of the jacking rod at TR 8, 5" is cut with a portable bandsaw. The nut is then threaded onto the jacking rod without problem. At TR 11, we mark a cut point 2" from the end where we see the bend/kink, but do not make this cut today because it is the end of shift.

There is a hydraulic pump (Powerteam) in use today to work with the jacks. A generator – MQ Power 40 – ABF ID 002051 is in use today with the hydraulic pump. A generator – Whisperwatt 7000 – ABF ID 002343 is in use for part of the day. A compressor – IR P185R – ABF ID 002075 is idle today. Various forklifts are used in different parts of the day. A Kubota cart is used today. A portable band saw is used briefly today.

Note that there is k-rail at this work area. Some of the k-rail is rented and addressed by the rental agreement. Some of the k-rail is ABF's k-rail (27 pcs @20' and 8 pcs @10') used on site and paid as rented from ABF on a daily basis. However, one of the purchased 10' k-rail and one of the rented 20' k-rail have been removed at some point by ABF's ironworkers. To compensate, the ABF k-rail quantities will be reduced by one for each length. To elevate the k-rail, crane mats and timber blocking (12x12's) are in use. The k-rail quantities are as follows:

10' bought k-rail = 20 pieces (minus 1 missing)

10' ABF k-rail = 8 pieces

20' rented k-rail = 22 pieces (minus 1 missing)

20' ABF k-rail = 27

See Victor Altamirano diary for labor/equipment and other details of today's work.

Scott Croff and Mike Malyy from CT-METS work on the wire run to the south of the test rigs to connect the 2 Acoustic Emissions sensors at each of the 7 test rigs (TR's 5 through 11) to the data logger in the tool box near TR 5, where there is power and a short run with the network cable to the BayView Trailer. Also, at TR's 5 and 6, the AE sensors on the couplers were epoxied on a previous day, and today they want to connect and run the wires. VGO assists CT-METS with the wire runs for the AE sensor on the couplers at TR's 5 and 6 – the wire for the CT-METS AE sensor on the coupler needs to run out the same handhole as all the VGO wires, so VGO wants to run the CT-METS AE wires so that they can ensure (be responsible) that the VGO wires are not damaged.

### INSPECTOR OT REMARK:

Field 2 hours: I am in the field for CCO 314 test rig work. ABF's shift is 0700 to 1930. My shift is 0700 to 1730 and my OT hours are 1530 to 1730.